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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/752,612	12/29/2000	Dan Kikinis	4688P014	1294
33448	7590	11/19/2004	EXAMINER	
ROBERT J. DEPKE LEWIS T. STEADMAN HOLLAND & KNIGHT LLC 131 SOUTH DEARBORN 30TH FLOOR CHICAGO, IL 60603			MA, JOHNNY	
			ART UNIT	PAPER NUMBER
			2614	

DATE MAILED: 11/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/752,612

Applicant(s)

KIKINIS, DAN

Examiner

Johnny Ma

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-51 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 December 2000 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4,8,9/01,2/02
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: _____

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: "330" see page 13, line 7 and page 14, line 5. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities: a description of Figure 4 is missing in the Brief Description of Drawings.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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4. Claims 1-6, 9, 11, 14, 16, 18-23, 26, 28, 31, 33, 35-40, 45, 48, and 50 are rejected under 35 U.S.C. 102(e) as being anticipated by Herrington et al. (US 2004/0221310 A1).

As to claim 1, note the Herrington et al. reference that discloses an electronic program guide with a related-program search feature. The claimed “displaying a schedule for a first program, from a program data having the program’s schedule and a description of the program’s content” is met by “program guide information...includes television program listings data such as program times, channels, titles, descriptions, program type, genre, actors, etc.” (para. 0038) and “[t]elevision program listings, advertisements, programming information, and other information may be displayed on television 68” (para. 0045)]. The claimed “displaying a plurality of search elements derived from the description of the first program” is met by “[a] list of attributes for the given program may be displayed for the user” (para. 0069) wherein attributes include those derived from the description of the first program as illustrated in Figure 8A (e.g. Broncos, Cowboys, Football Game). The claimed “selecting at least one of the plurality of search elements” is met by the selection of search elements wherein “the program guide may then locate program listings based on the user-configured search parameters” (para. 0063). The claimed “finding at least one of a plurality of programs similar to the first program” is met by “...the program guide may display a display screen including on-screen listings for programs that are related to the given program based on the user-configured search parameters” (para. 63). The claimed “the found program having at least one of a plurality of second search elements derived from the description of the second program that matches the selected search element” is met by program guide system locating related programs based on selected program attributes (para. 0065).

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As to claim 2, the claimed “displaying the found programs most similar to the first program before the found programs least similar to the first program” is met by “[t]he list may have been sorted based on attributes that were used by the program guide to locate the displayed program listings...For example...based on how many attributes matched” (para. 0062). The claimed “wherein the found programs most similar to the first program have the greatest number of search element matches” is met by the disclosed sort by number of attributes matched further evidenced by displaying the more closely matched programs at the top of the list (para. 0066).

As to claim 3, the claimed “displaying a plurality of search parameters derived from the schedule of the first program” is met by “[a] list of attributes for the given program may be displayed for the user” (para. 0069) wherein attributes include those derived from the description of the first program as illustrated in Figure 8A (e.g. Broncos, Cowboys, Football Game). The claimed “selecting at least one of the plurality of search parameters” is met by the selection of search elements wherein “the program guide may then locate program listings based on the user-configured search parameters” (para. 0063). The claimed “displaying the found programs most within the search parameters before the found programs least within the search parameters” is met by the disclosed sort by number of attributes matched further evidenced by displaying the more closely matched programs at the top of the list (para. 0066).

As to claim 4, the claimed “specifying an element weight associated with a selected search element” is met by “[t]he configuration display screen 138 may contain options for providing the user with an opportunity to assign various importance levels to the on-screen program attributes” (para. 0064). The claimed “wherein the found programs most similar to the first program have the greatest number of search element matches having the greatest weight” is

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met by “[d]isplay screen 140 may include a list of programs that are related to the given program based on the search parameters of configuration display screen 138 of Fig. 7a.” wherein programs most closely matching the user-configured search parameters are displayed at the top of the list (para. 0066).

As to claim 5, the claimed “specifying a parameter weight associated with a selected search parameter” is met by user may assign different important levels for different program attributes (para. 0064) also see Figure 7a. The claimed “wherein the found programs most within the search parameters are the found programs most within the search parameters having the greatest weight” is met by “[d]isplay screen 140 may include a list of programs that are related to the given program based on the search parameters of configuration display screen 138 of Fig. 7a.” wherein programs most closely matching the user-configured search parameters are displayed at the top of the list (para. 0066).

As to claim 6, the claimed “wherein the element weight is a discrete value specified via an input device” is met by “different importance levels such as required, desired, ignored, or excluded” (para. 0064) wherein system is controlled by user input interface “such as a wireless keyboard, mouse, trackball, dedicated set of buttons, touch screen display remote, etc... Remote controls” (para. 0045).

As to claim 9, the claimed “wherein the discrete value is selected using a keypad” is met by “[e]ach set-top box 62, videocassette recorder 66, and television 68 can be controlled by one or more remote controls 70 or any other suitable user input interface... Remote controls, such as remote control 70, have various buttons [keypad] that can be pressed by the user such as arrow keys (e.g., for directing on-screen movement of a highlight region, for directing scrolling

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functions, etc.)...channel number keys...etc.” (para. 0045) wherein “[a] list of attributes for the given programs (such as the attribute list of display screen 300 of FIG. 7c) may be displayed for the user (e.g., by the program guide or other interactive application running on the system). A moveable highlight region such as highlight region 302 or other such indicator may be used to provide the user with an opportunity to select attributes of interest to be used in searching for related programs” (para. 0069) and “...the user may select one or more attributes (e.g., by pressing remote control OK button or otherwise selecting desired attributes) (para. 70). Note that moveable highlight region is directed by remote control, for example by use of the arrow keys (para. 0045).

As to claim 11, please see rejection of claim 6 noting importance levels may be assigned to a plurality of program attributes (para. 0064).

As to claim 14, please see the rejection of claim 9 noting the importance levels may be assigned to a plurality of program attributes (para. 0064).

As to claim 16, the claimed “wherein the plurality of search elements is selected from the group consisting of a program title, an actor, a director, and a genre” is met by identifying related programming “...based on criteria, such as whether a program is related in attribute to the particular program, whether a program is a sequel or prequel of the particular program, whether a program is in the same program series as the particular program [title], whether a program is a series that is related to the particular program, whether a program is related the user-selected program in content or subject matter, whether a program has the same actor(s), director, category, theme, or production years as the user-selected program, etc” (para. 0051).

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As to claims 18-23, please see rejections of claims 1-6 respectively wherein the Herrington et al. system is embodied in a set-top box (para. 0043) containing a processor to handle tasks associated with implementing an application on the set-top box that assists the user in searching for programs (para. 0050).

As to claim 26, please see rejection of claim 9.

As to claim 28, please see rejection of claim 11.

As to claim 31, please see rejection of claim 14.

As to claim 33, please see rejection of claims 16.

As to claims 35-40, please see rejections of claims 1-6 respectively wherein the Herrington et al. system is embodied in a set-top box implementing an application that assists the user in searching for programs (e.g., a stand-alone application) (para. 0050).

As to claim 45, please see rejection of claim 11.

As to claim 48, please see rejection of claim 14.

As to claim 50, please see rejection of claims 16.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 7-8, 12-13, 24-25, 29-30, 41-43, and 46-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herrington et al. (US 2004/0221310 A1) in further view of Graves et al. (US 5,410,344).

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As to claim 7, the claimed “wherein the discrete value is selected from a range of values displayed as a continuum.” Note the Herrington et al. reference discloses assignment of importance levels for various program attributes (para. 0064) and provides an example in the form of discrete values: required, desired, ignored, or excluded (para. 0064). However, the Herrington et al. reference is silent as to selection from a range of values displayed as a continuum. Now note the Graves et al. reference that discloses an apparatus and method of selecting video programs based on viewers’ preferences. The Graves et al. reference discloses a viewer may adjust ratings for program attributes using a horizontal bar graph (Graves 6:63-68; 7:1-4) also see Figure 5. Therefore, the examiner submits that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Herrington et al. selection of importance levels with the Graves et al. horizontal bar graph for the purpose of providing more specific importance level indicators so that user desired related programming may be located with a finer degree of accuracy.

As to claim 8, the claimed “wherein the range of values displayed as a continuum is a slider graphic” is met by the horizontal bar graph as discussed in the rejection of claim 7.

As to claims 12 and 13, please see rejections of claims 7 and 8 respectively noting the importance levels may be assigned to a plurality of program attributes (para. 0064).

As to claims 24-25 and 29-30, please see rejections of claims 7-8 and 12-13 respectively.

As to claims 41-42 please see rejections of claims 7-8 respectively.

As to claim 9, the claimed “wherein the discrete value is selected using a keypad.” Note the Herrington et al. reference discloses using a remote control (para. 0045) to assign various importance levels to the on-screen program attributes (e.g. required, desired, ignored, or

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excluded) (para. 0064). However, the Herrington et al. reference is silent as to assigning importance levels with a keypad. Nevertheless, the examiner gives Official Notice that it is notoriously well known in the art of assign weighting to allow a user enter in a numeric weight via a key input device for the purpose of designating a specific numeric weight in a convenient manner, so that instead of slowly incrementing a weight to a desired value and user may directly enter in the number thus alleviating cumbersome numeric entry. Therefore, the examiner submits that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Herrington et al. importance level designation accordingly for the above stated advantages and for the further purpose of providing searches that are more finely tailored to a users interests.

As to claims 46-47, please see rejections of claims 12-13 respectively.

7. Claims 10, 15, 27, 32, 44, and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herrington et al. (US 2004/0221310 A1) in further view of Graves et al. (US 5,410,344) and Allport (US 6,567,984 B1).

As to claim 10, the claimed “wherein the discrete value is selected using a slider mechanism on a remote control device.” Note the Herrington et al. reference discloses using a remote control, of various embodiments to control a program guide system (Herrington [0045]). Furthermore, the Herrington et al. and Graves et al. combination discloses weighting program attributes using a horizontal bar graph. However, the Herrington et al. and Graves et al. combination are silent as to a remote control with a slider mechanism. Now note the Allport reference that discloses a remote controller wherein “[t]he physical actuating buttons may include push buttons... switches... sliders, or other mechanisms...” wherein the functions of the

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buttons may vary (Allport 6:23-30). The Allport reference also discloses that, among other functions, the sliders could be used to change channels on a TV (Allport 7:8-11). Therefore, the examiner submits that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Herrington et al. and Graves et al. remote controlled weighting of program attributes via a horizontal bar graph with the Allport slider mechanism for the purpose of providing an intuitive and easier means to adjust the program attribute bars wherein the weights could be easily adjusted by using a slider on the remote control resulting in adjustment of the displayed horizontal bar graph.

As to claim 15, please see rejection of claim 10 noting the importance levels may be assigned to a plurality of program attributes (para. 0064)

As to claims 27 and 32, please see rejections of claims 10 and 15 respectively.

As to claims 44 and 49, please see rejections of claims 10 and 15 respectively.

8. Claims 17, 34, and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herrington et al. (US 2004/0221310) in further view of Bates et al. (US 6,681,396).

As to claim 17, the claimed "wherein the plurality of search elements is selected from the group consisting of a show time and a channel." Note, the Herrington et al. reference discloses search attributes including channel, year produced or any other suitable program attributes (Herrington [0071]). However, the Herrington et al. reference is silent as to a show time search element. Now note the Bates et al. reference that discloses a method of searching for similar programming wherein "it may be desirable to limit the search to the same date, or to search forward on future dates to locate later showings of the television program" (Bates et al. 6:53-59). Therefore, the examiner submits that it would have been obvious to one of ordinary skill in the

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art at the time the invention is made to modify the Herrington et al. related programming search with the Bates et al. show time search element for the purpose of providing an user an increased ability to locate related programming wherein a user may specify a time period in which he wishes related programming to be identified.

As to claim 34, please see rejection of claim 17.

As to claim 51, please see rejection of claim 17.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The Lu reference (US 6,640,337 B1) discloses performing searches of EPG data using fuzzy logic search engines.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Johnny Ma whose telephone number is (703) 305-8099. The examiner can normally be reached on 8:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (703) 305-4795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jm


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